

IN THE CLAIMS:

Claims 1-16. (Cancelled)

17. (Currently Amended) A system for interfacing a communication signal with a three phase electrical power network having at least one service panel, said system comprising:

a carrier current device located at a first position and providing a power line carrier signal; and

a passive coupling device adapted to be connected to one of said at least one service panel for coupling said power line carrier signal to each phase of a three phase power distribution network ~~of said building~~, wherein said three phase power distribution network is a Delta-connected three phase power distribution network;

and wherein said passive coupler device includes a transformer device providing a signal voltage differential across all pairs of combinations of said three phases wherein a number of turns into output phase winding of said transformer are adjusted as a function of a number of turns in the primary winding of said transformer in order to substantially equalize signal coupling effectiveness between said primary winding and each of said pairs.

18. (Previously Presented) The system according to claim 17, wherein said one service panel is a service panel which is the most electrically centrally located service panel located in a building.

19. (Currently Amended) The system according to claim 17, wherein said passive coupling device is adapted to be coupled to a high voltage distribution system having a voltage of at least 277 volts.

20. (Currently Amended) The system according to claim 17, wherein the three phase electrical power network is located in a building.

Claims 21-22. (Cancelled)

23. (Currently Amended) The system according to claim 17, wherein the service panel is remote from the first ~~location~~ position.

24. (Previously Presented) The system according to claim 23, wherein the three phase electrical power network is located in a building.

25. (Currently Amended) The system according to claim 23, wherein said power distribution network includes at least two service locations wherein said service location directly connected to said passive coupler coupling device is the most centrally located of said at least two service locations with respect to the length of electrically wiring in said distribution network.

Claims 26-48. (Cancelled)